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LATERAL ENTRY OF MILITARY PERSONNEL

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March 1992

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The current system of training people within the military may no longer be affordable. IDA considered whether the military would benefit from increased lateral entry, a policy in which recruits with some civilian training come into the military at an intermediate level. First, IDA reviewed current policies, which are different depending on whether the personnel have served in the military before or not and whether the personnel are entering the active forces or the reserves. Next, IDA examined the types of occupational specialities appropriate for lateral entry and benchmarks for the amount of cost savings. Lateral entry provides a cost-effective means of reducing the size of the active forces by accessing people after they are trained and productive and by reducing the number of people in the military training establishment. Lateral entry also gives the military the means to add people with the right technical skills quickly. The study considers benefits and risks of policy change and discusses implementation through changes in personnel requirements, easier re-entry for prior service personnel, and more flexible pay.

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PREFACE

This paper was prepared by the Institute for Defense Analyses (IDA) for the Office of the Assistant Secretary of Defense (Force Management and Personnel) (OASD(FM&P)), under contract MDA 903 89 C 0003, Task Order T-L7-798, issued 15 March 1990. The objective of the task was to identify promising approaches to maintaining strong military manpower capability during a period of declining budgets and force levels. This is one of a total of seven papers to be published. Each of the seven papers covers a specific area of military manpower management: the proper experience mix, personnel movement, the timing of training, lateral entry, the link between career progression and assumption of management responsibilities, individual training methods, and increased use of simulators for training. The topic of this paper is lateral entry.

This work was reviewed by William T. Mayfield of IDA and by Harry J. Gilman, an IDA consultant.

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I. INTRODUCTION

The U.S. military services generally prefer to take people into the military at the lowest possible paygrades and train them within the military system. In this way, they are said to prefer to "home-grow" their people. Relatively few individuals are brought in at high paygrades (E-4 and above). Even among military occupational specialties (MOSs) with close civilian counterparts, the services either provide or pay for a great deal of general training.

By contrast, civilian employers often avoid large investments in initial technical training by hiring individuals who are already trained. For example, hospitals do not recruit nurses by offering to train high school graduates, but by offering competitive salaries, benefits, and working conditions to candidates who have already received training.

In the civilian world, new employees typically have at least some general training, or both training and experience with other employers. Employees in the civilian world, particularly younger employees, tend to change employers often.

This paper considers whether the military services might benefit from tapping into available civilian labor markets. This policy is called lateral entry, because it implies that trained recruits would not come up from the bottom but would enter at an intermediate grade level. (However, as we will see, scholarships and bonuses are alternatives to higher paygrades for trained entrants. Another alternative is increased retention of experienced military personnel.)

First, current military policies and experience with respect to lateral entry are reviewed. These policies are different depending on whether the personnel have served in the military before or not and whether the personnel are in the active forces or the reserves. Next, evidence is presented on what kind of lateral-entry policy would be appropriate. Finally, a perspective on how current policies might be changed is offered, and areas where additional research would be beneficial are identified.

II. POLICIES ON LATERAL ENTRY

A. BACKGROUND

The military has traditionally "home-grown" its people. This is at least partly because of a belief that human capital in the military is specific—that there is a "military way" that needs to be inculcated. This belief is probably derived from the observation that senior enlisted jobs in the military are not solely technical jobs. They often involve a large component of leadership. There is concern about putting people in paygrades that usually imply leadership responsibility without their learning to be leaders by working their way up through the ranks. In addition, many military jobs are substantially different in technical content from related civilian jobs. For example, repair personnel need to know the specific characteristics of the radar, engine, vehicle, or other equipment they are involved with.

There is an additional argument for the military providing training even in military specialties that have occupations with close civilian analogues. Investments in general training (training with value outside of the military) will allow the services to recruit people at below-market wages. People who receive such training, though, may be inclined to leave the military after their minimum service commitment has expired to take advantage of their marketability, leaving DoD without an adequate return on its training investment. Of course, the fact that the military provides training for new recruits does not necessarily mean that the military must perform all training directly. In many cases, civilian training (either before or after formal enlistment) can be paid for by the military.

General military accession regulations are not explicit about lateral entry. Army regulations promulgate rules for accession that imply that the usual accession occurs at the lowest level possible, with exceptions for various reasons, such as Reserve Officer Training Corps (ROTC) background.

There are two methods to determine the extent of lateral entry in the military. One way is to review accession data to determine the volume of accessions that occur at high paygrades. Another way is to review the volume of accessions under programs designed to encourage lateral entry. We pursued both approaches and concluded that the military services use lateral entry in a very limited way. Lateral-entry programs are used most often in recruiting for the health professions.

Table 1 shows that less than 1% of active enlisted personnel without prior service enter the military at paygrade E-4 or above. Less than a quarter of them enter anywhere above E-1, and most of these are not lateral entrants.

Prior-service accessions can be regarded as a form of lateral entry. Like other lateral entrants, prior-service enlisted accessions allow the services to avoid the high cost of initial skill-training. Among enlisted personnel, prior-service personnel constitute less than a tenth of the total accession pool. However, nearly half of these accessions occur at high paygrades (E-4 and above). In the Navy, three-quarters of prior-service accessions occur at high paygrades.

In the reserves, lateral entry is used more extensively. As one would expect, the bulk of prior-service enlisted accessions into the reserves are at high paygrades. What is more interesting is that nearly 6,500 accessions, or 7% of total non-prior-service accessions, occurred at high paygrades.

Unfortunately, we were unable to separate prior-service from non-prior-service officers, so the picture on lateral entry among active officers is more difficult to paint. In total (prior service and non-prior service), 82% of officers entered at O-1, while only 2.2% entered at O-4 or above in 1989. The situation was different in 1975. Then, nearly 9% entered at O-4 or above, while only 72% entered at O-1.

B. NON-PRIOR-SERVICE POLICY

1. Active Component

Non-prior-service lateral-entry programs exist for the active component, but they are not widely used. Summaries of lateral-entry procedures for each of the services [1] are given below.

- Army. Less than 1% of regular Army enlistments occur through the Army's lateral-entry program (called Army Civilian Acquired Skills Program), perhaps due to lengthy screening and classification procedures.
- Air Force. The Air Force does not have a formal program for lateral entry. Recruits can "test out" of technical training and be assigned immediately to an MOS, but they do not receive higher paygrades.
- Navy. The Navy has an Advanced Pay Grade (APG) program that is part of the Direct Procurement Enlistment Program (DPEP). The Navy primarily uses lateral entrants to fill middle-grade petty officer slots in understaffed specialties. The Navy program also has cumbersome screening and classification procedures, and less than 2% of Navy non-prior-service accessions are APG recruits.

Table 1. Enlisted Accessions by Paygrade, FY 1989

	E-1	E-2	E-3	E-4	E-5	E-6	E-7	Total[a]	Total E-4 or higher	Percentage E-4 or higher
Active, Non-Prior-Service Accessions										
Army	80,996	15,013	10,222	125	7	1	1	106,365	134	0.13
Navy	59,838	4,373	9,638	76	17	4	3	73,949	100	0.14
Marine Corps	22,589	9,537	13	10	2	6	1	32,158	19	0.06
Air Force	33,825	3,467	5,003	3	357	1	1	42,659	362	0.85
Total	197,248	32,390	24,878	214	383	12	6	255,131	615	0.24
Percent	77.3	12.7	9.8	0.1	0.2	0.0	0.0	100.0		
Active, Prior-Service Accessions										
Army	707	6,325	2,440	3,903	626	74	14	14,089	4617	32.77
Navy	651	257	764	2,653	1,855	624	37	6,841	5,169	75.56
Marine Corps	282	634	284	342	129	20	3	1,694	494	29.16
Air Force	135	455	244	142	184	13	4	1,177	343	29.14
Total	1,775	7,671	3,732	7,040	2,794	731	58	23,801	10,623	44.63
Percent	7.46	32.23	15.68	29.58	11.74	3.07	0.24	100.00		
Reserve Accessions										
Non-Prior-Service	68,124	5,442	10,873	2,143	3,134	1153	68	91,144	6,498	7.13
Percentage	74.7	6.0	11.9	2.4	3.4	1.3	0.1			
Prior-Service	5,005	8,138	18,018	53,435	26,672	6,357	2,698	120,872	89,072	73.69
Percentage	4.1	6.7	14.9	44.2	22.1	5.3	2.2			

Source: Defense Manpower Data Center.

[a] Components do not add to total because of accessions with unknown paygrades (less than 0.5% of total accessions), etc.

Several lateral-entry programs, or more specifically, programs to encourage college-level entrants, during the early 1980s, have had mixed results.

The most evidently successful program was the Marine Corps Community College Enlistment Program, which began in October 1981. The program offered a guaranteed occupational specialty with a four-year assignment, accession at E-2, and accelerated consideration for promotion (E-4 at 13 months vs. the usual 25 months and, early in the program, E-5 consideration at 25 months vs. the usual 40 months). The Marine Corps regarded the program as largely successful, because of walk-ins from advertising, referrals from the officer procurement program in four-year colleges, and bad economic times.

The experience of the Army College Recruiting Program (FY 1980-83), which also attempted to recruit from community colleges, was not as good. The program never had as many college recruiters as was planned. The colleges resented the recruitment of tuition-paying students into the active forces, because it resulted in a loss of revenue to the college. The Army was therefore forced to emphasize accessions into the reserves. In addition, jurisdictional disputes arose between high school and college recruiters.

Another program with problems was the Navy's Lateral Entry Accession Program (LEAP) (August to December 1982). The program was launched in the midst of a severe recession and targeted civilians in Ohio and Michigan with critical skills. For 13 critical skills, enlistees could be brought in at E-4 to E-6. The program included a job-knowledge test that was difficult for candidates to pass. However, Navy personnel already doing the jobs also found it difficult to pass. Nevertheless, the program spread to other areas the next year. Because of disappointment over the number of LEAP accessions, the Navy redirected its efforts toward a vocational training program that encourages community colleges to establish curricula of interest to the Navy. In return, the Navy promises graduates lateral entry if they pass a job-knowledge test. This program does not appear to be widely used.

2. Reserve Component

There is considerably more lateral entry into the reserves than into the active military. In addition, there are special programs for occupations with critical shortages, mostly in the health professions.

Of course, the reserves rely heavily on lateral entry from the active components. Most of these people received their initial skill-training in the military, and it is cheaper to train one person than two.

Ironically, in one special case the reserves have required lateral entry, had trouble getting people, and had to drop back from their requirements. The Army reserve used to require nurses to have one year of full-time work experience after graduation in order to join. Now, it requires only six months part-time employment.

3. Examples From the Medical Field

Active duty physicians typically enter the military laterally. In 1990, 1,169 physicians, or 65.9 percent of the total, entered the military as a result of the Armed Forces Health Professionals Scholarship Program, which offers tuition and expenses for civilian training in return for a military service commitment. Another 429 physicians (242 percent of the total) were recruited directly after completing medical school. Both the number and the proportion of physicians recruited directly has risen since 1988.

The reserves use non-prior-service lateral-entry programs extensively in medical recruiting and retention. For certain medical specialties, reserve enlistees can receive stipends, loan repayments, or bonuses. The stipend and loan repayment programs began in FY 1986 and were expanded in FY 1988 to offer an option for service in a ready reserve capacity with exemption from drills.

The stipend program allows payments ranging from $366 to $732 per month (FY 1990) for reservists with medical training. The program is designed to attract individuals in their third or fourth year of college as well as practitioners early in their careers, for example, doctors setting up a practice or nurses paying off loans.

The loan repayment program had been restricted to repayment of loans made under the Public Health Service Act or the Higher Education Act. Recently, the program was expanded to cover other education loans for reservists in critically short specialties. Beneficiaries can receive up to $3,000 per year of service up to a ceiling of $20,000. Because of restricted eligibility, fewer people have taken advantage of the loan repayment program than have used the stipend program. A recruitment bonus test program was begun in August 1989 to recruit physicians and nurses in critically short wartime specialties who live in specific areas.

The numbers of participants in the stipend and loan repayment programs are shown in Figure 1, and a breakout by profession and service for FY 1990 is shown in Figure 2. Numbers for the bonus test program are not included because it is just getting off the ground.

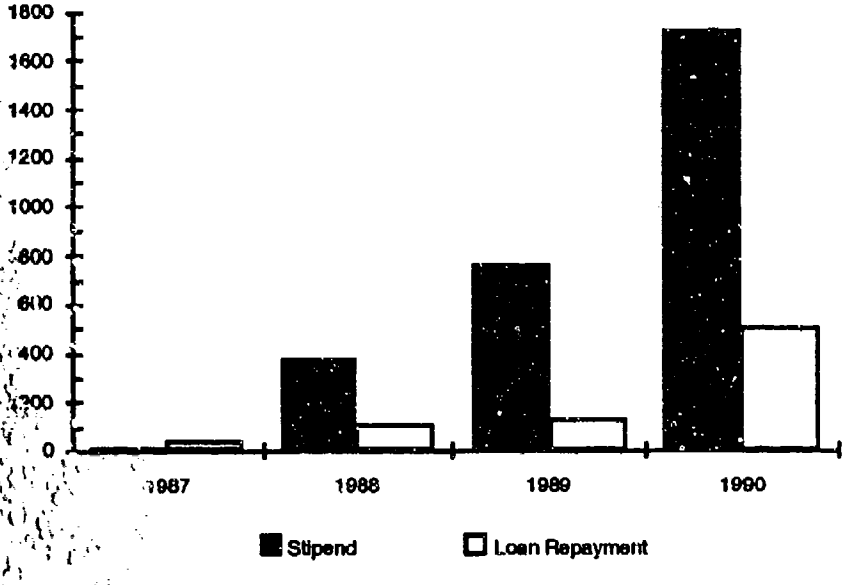


Figure 1. Participants in Medical Reserve Program

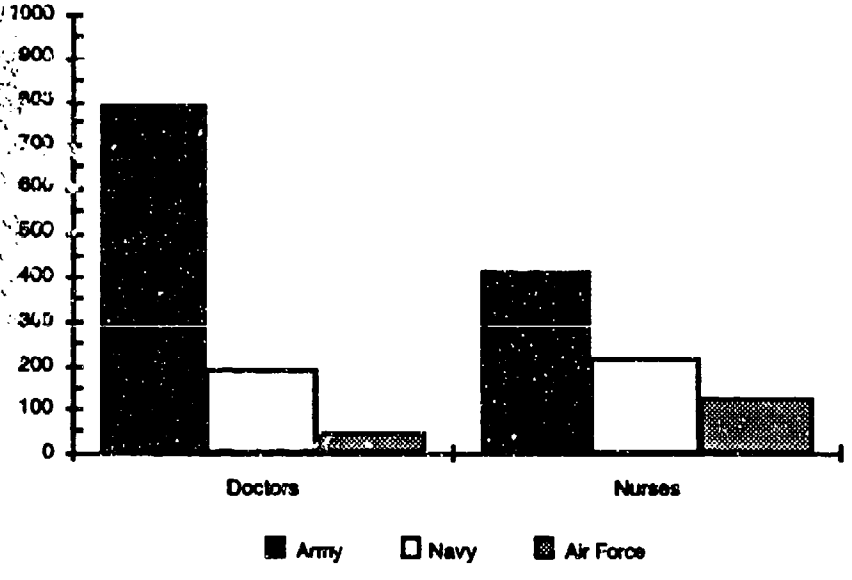


Figure 2. FY 1990 Participants in Medical Reserve Program by Profession and Service

The Army Reserve advertises the new Specialized Training for Army Readiness (STAR) program that pays for tuition, books, and fees at Army-approved civilian schools for several types of health professionals, including emergency medical technicians,

practical nurses, and dental laboratory, operating room, X-ray, pharmacy, respiratory, and laboratory specialists. Part of the impetus for the STAR program was a shortage of training billets at Fort Sam Houston. It was also hoped that the Army could save money. The cost of training in-house is estimated at approximately $12,000, while the cost of training at civilian schools is approximately $6,000. In addition, the trainees could attend schools in their local areas and avoid being uprooted from their families, an important consideration in attracting people into the reserves.

In the late 1970s, the Navy provided subsidies for nurses, then later suspended them. By 1988, the Navy was experiencing a shortage of nurses and provided training subsidies again, including ROTC, an Officer Candidate Program with stipend, and a bachelor degree completion program at an E-3 salary.

For doctors, the services have very generous scholarship programs. The services also provide military-specific training for doctors at their own medical school, the Uniformed Services University of the Health Sciences. Several analyses (for example, Reference [2]) have found this to be an extremely expensive way of training doctors relative to scholarship programs.

Interestingly, even when lateral-entry programs are implemented, they are done primarily in terms of paying for education in the civilian world, then bringing people into the military. Stipend or loan repayment programs, more recent innovations, are about the only ways that the military competes in civilian labor markets for personnel who are already trained.

C. PRIOR-SERVICE POLICY

A key difference between prior-service people and other lateral entrants is that prior-service personnel know the "military way." They are not subject to the argument that they cannot be leaders. Nevertheless, the military does not particularly encourage prior-service entrants [3]. The Army, for example, will re-admit an individual at the same paygrade if fewer than 24 months have elapsed since the person left the military. If more time has elapsed, the Army penalizes the person one or more paygrades. The rationale is that the person's skills have deteriorated.

Perhaps one reason that the military does not encourage prior-service enlistments is the belief that they would decrease the quality of the force. The people who would be attracted might be those who did not do well in either military or civilian jobs. Little information is available that bears on the validity of this belief.

For people who leave the military in occupations with close civilian counterparts, it may reasonably be assumed that they can at least equal their military salaries in civilian positions. If they succeed in civilian careers, the longer their separation from service, the higher their salaries will become; therefore, the incentive to reenter the military decreases.

D. SUMMARY

Over the past several years a variety of pilot lateral-entry programs have been undertaken by the services. Existing lateral-entry programs for the active component have largely fallen into disuse. For the reserves, lateral-entry programs are used more extensively. The primary reason for this overall lack of lateral entry seems to be the belief within the military that there is a military way that must be introduced at the start of a career, a concern over developing leadership skills.

III. EVIDENCE ON APPROPRIATE LATERAL-ENTRY POLICY

A. THEORETICAL CONSIDERATIONS

Human capital theory raises some interesting issues regarding lateral entry. It posits two types of human capital investments: investments in general skills and investments in firm-specific skills. The theory as expounded by Becker [4] predicts that workers receive the complete return on general skills (and therefore should bear the cost of acquiring them), while the returns on firm-specific skills are split between employer and employee.

Clearly, many military specialties require mainly military-specific skills; however, many others require some mix of military-specific and general skills. Finally, some specialities, such as the medical specialties, require mainly general skills.

The theory predicts that employers will not provide training in general skills because employees can take general skills to other employers at any time. Rather, employers should provide training in skills for which their firms are likely to receive some return, the specific skills.

Thus, human capital theory makes the argument that the portion of the military training establishment that provides general training should shrink considerably. Specialties that require mainly general skills should be brought in laterally.

This leaves open the question of what kinds of training—general and/or specific—should be provided to enlistees in occupations with close civilian counterparts and when and how the training should be provided. One difference between the military and civilian employers in this regard is that the military can enforce long-term labor contracts, making it difficult for personnel to leave before an adequate return on general training has been received. In cases where the military-specific component of training is small, it may make sense to bring in lateral entrants rather than training personnel. Theory offers no compelling reason for employers to provide general training.

A necessary condition for lateral entry in the military is the existence of a civilian market in the particular occupational specialty. In a slack market, it will be relatively easy for the military to recruit specialists. In a tight labor market, it will be more difficult.

Paradoxically, the common situation may be that of reverse lateral entry: the military trains people who serve for a while, then move to a similar civilian job at higher pay.

For people who enter the military in the usual way, because they are given the opportunity to be trained means the military does not have to pay them as much during their first enlistment. Long enlistment periods allow the services to recapture a larger part of their investment in training. Lateral entrants who have paid for their own training will expect to be compensated at market rates.

B. CONCEPTUAL MODEL

1. Appropriate Specialties

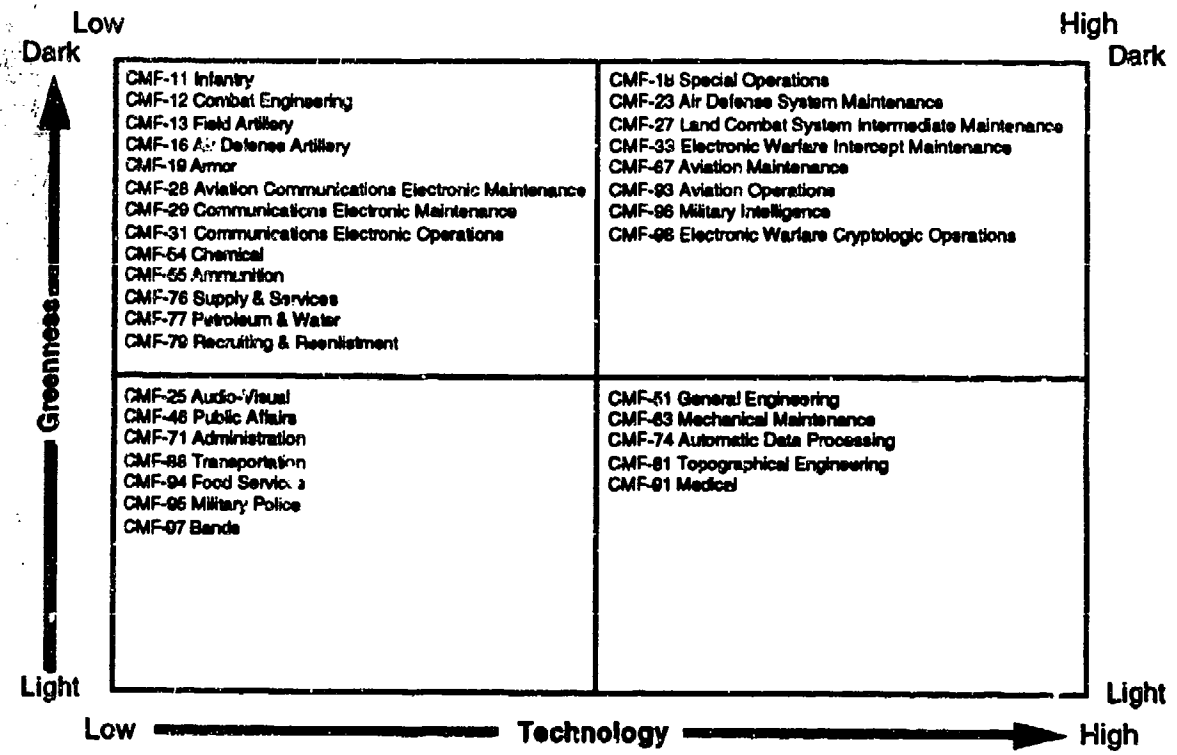
A useful conceptual framework for thinking about lateral entry and civilian training policy is provided by Buckley [5]. He suggests that military specialists be classified on two dimensions—"greenness" (military specificity) and technical sophistication. A simple low-high classification scheme results in a 2 by 2 matrix (Figure 3). Specialists with light greenness (120 low-tech MOSs and 59 high-tech MOSs in the Army) could be considered for alternative training or lateral-entry policies. Information on the proportion of accessions in each cell, along with notional training cost figures, would provide a good sense of the potential savings to be gained through lateral entry.

The low-tech, light greenness MOSs are particularly adaptable to civilian training, according to Buckley. Because of their long training times and in-house high training costs, the high-tech, light greenness specialties are particularly adaptable to lateral entry. Buckley suggests that such specialties be recruited by achievement rather than aptitude. Many of these specialties (e.g., practical nurse) have licensing requirements. Also, achievement can be measured through tests administered by the services. This would make it possible for the military to have objective criteria for lateral entrants

For example, light wheel vehicle repairers (MOS63B) are trained in a 13-week (two days per week) course. A detailed task-by-task analysis indicated that 98% of the tasks can be taught by civilian vocational schools. Annual cost savings through civilian training for this MOS were estimated to be $4.4 million. Moreover, civilian courses have more hands-on training time and lower student-equipment ratios. In a pilot test, civilian trainees

exhibited higher achievement test scores after training. Buckley sketches out a delayed-entry model for high-tech, light greenness MOSs in which the sequence is:

- recruits are enlisted and initial incentives paid
- recruits receive vocational/technical training
- knowledge is tested
- those who pass the test are accessed and remaining incentives are paid
- recruits complete basic training
- if necessary, recruits complete abbreviated advanced individual training
- recruits join their units.



Source: Reference [5].
Note: CMF stands for Career Management Field.

Figure 3. Greenness-Technology Framework for Alternative Policies

2. Potential Savings

Consider a simple example of lateral entry for an appropriate specialty such as electronic technician. The lateral entrant has an advantage in terms of more months of

productive service. The model summarized in Table 2 allows calculation of a theoretical break-even level of bonus, scholarship, or higher pay due to higher rank that could be offered to the lateral entrant.

Table 2. Calculation of Break-Even Bonus for Lateral Entrant

	Untrained Entrant	Lateral Entrant
Time (Months)		
Training Before Service	0	24
Enlistment Period	48	48
Recruit Training	2	2
Specialized Training	12	2
Productive Period (Months) (PM)	34	44
Cost of Training (Dollars)		
Training Before Service	0	?
Recruit Training	$4,000	$4,000
Specialized Training	27,000	4,500
Total Cost of Training (TCT)	31,000	8,500 + ?
Training Cost per Productive Month (CPM)	911.76	193.18 + ?
Break-even bonus = $(CPM_U \times PM_{LE}) - TCT_{LE}$ = $31,600 ($31,100 discounted).		

Note: The break-even bonus, equal to the cost per productive month for untrained times productive months for lateral entrant minus known training cost for lateral entrant, assumes both are fully and equally productive at the end of training. If each reenlists for a second tour, the value of the break-even amount becomes approximately $26,300.

In the example, the lateral entrant comes in with an associate degree, while the normal entrant comes in untrained at the E-1 level. For both, a four-year enlistment period and two months of recruit training (boot camp) are assumed. (For MOSs with long training periods, enlistment periods are often longer.) The untrained entrant also receives 12 months of specialized training in electronics in the military. We assumed that the lateral entrant requires two months of military-specific training after boot camp to become fully productive.

During the initial enlistment period, the untrained entrant has 34 productive months, while the lateral entrant has 44. Thus, the military gets more productivity faster from the lateral entrant.

The cost of training is also different for the two types of entrants. The cost of recruit training for both is roughly equal at $4,000 [6]. The cost of specialized training for

the untrained entrant is estimated to be $27,000,[1] while the lateral entrant's training is assumed to cost roughly one-sixth that amount, due to a shorter training period.

The total cost of training for the untrained entrant is $31,000 (Table 2), while the total cost for the lateral entrant is $8,500. The raw difference in training cost is $22,500. However, we must also adjust for the longer productive period of the lateral entrant. The result is that the value of the lateral entrant is over $31,000 more than that of the untrained entrant. The military could provide up to $31,000 in additional compensation to the lateral entrant and still be ahead.

This additional compensation to attract the lateral entrant could be allocated in several ways—a scholarship program, an educational loan repayment program, a lump-sum bonus, or a higher salary.

Several possible refinements to the concept could be made. For example, if the lateral entrant is accessed at a higher level, then the recruit and specialized training costs would be slightly higher. This could be accounted for. In addition, if one believes that recruiting costs are different for the two types, these could be accounted for.

Moreover, the simple model could be altered to amortize training costs over a longer period. The military can induce recruits to sign up for a second term. For example, if we assume that both entrants reenlist for a second term, the break-even point falls to $26,000, still a substantial amount. Differences in the likelihood of reenlistment, if known, could also be accounted for.

Finally, the risk of attrition after training may be different for the two types of personnel. (Attrition risk up to the point of course completion is accounted for in the training costs used here.) There is evidence that people with post-secondary education, the most likely lateral entrants, have lower attrition rates [9]. Note that while attrition of lateral entrants need not involve negating the value of a major investment, attrition of service-trained personnel does. Indeed, inducing either a service-trained or a civilian-trained person to stay results in productivity with no marginal training cost.

C. RESOURCE CONSTRAINTS

In a time of declining budgets, the military manpower system needs to use its resources effectively. Training people from the ground up is extremely expensive. At any

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1 See Reference [7]. This is the training cost in FY 1992 dollars for a high-quality high school graduate. Training costs for people in lower mental groups tend to be higher because of higher attrition rates [8].

given time, one active-duty person out of seven is receiving, delivering, or supporting individual training [10]. In the past, the resources have been available to maintain a large portion of the force structure in training. In the future, these resources may not be available.

The direct cost of specialty training is estimated to be around $6 billion per year, as of 1989. Training for medical specialists costs another $840 million [10]. Any increased efficiencies in this area are likely to significantly reduce costs.

On the other hand, the cost and benefits of the human resources used in training must be considered relative to their next most productive alternative. For many military personnel, the primary demand for their skills occurs in wartime. Involvement in training may be viewed as a productive way to spend time relative to the alternatives.

D. LOW PRODUCTIVITY OF NEW RECRUITS

Newly accessed recruits are nowhere near as productive as those with experience. For example, after one year of experience hospital corpsmen are only around 70% as productive as they are after four years of experience, and radio repair specialists are only half as productive, according to supervisor assessments [11]. Pay does not fully reflect these productivity differences; therefore, it may be cost-effective to use lateral entrants who are already productive, even if they are brought in at higher paygrades.

E. LATERAL ENTRY IN THE CIVILIAN WORLD

Lateral entry is a common occurrence in the civilian world. Employers typically do not provide or pay for general training. According to Hall's work on lifetime employment [12], employees hold an average of four different jobs by the time they reach age 25. Between the ages of 25 and 40, employees typically will have another four jobs. This would seem to indicate that civilian employers tend to hire people who are already trained and experienced.

F. SUMMARY

According to human capital theory, the military would see the most return on its investment if military specialties that require mostly general skills were filled laterally. We have seen how specialties appropriate for lateral entry can be identified and what the potential savings would be. Given the present atmosphere of resource constraints, increased use of lateral entry is something the military should consider.

IV. A POLICY PERSPECTIVE

A. RECOMMENDATIONS

Based on the foregoing analyses, a number of recommendations can be made.

1. Make lateral entry virtually universal for some occupations. For example, the evidence suggests that it is simply not cost-effective for the military to train doctors.

2. Expand lateral entry in the occupations in which it already exists. Among these are nursing and repair occupations.

3. Consider expanding the occupations in which lateral entry is encouraged. Focus on occupations with a relatively small component of skill requirements specific to the military. These could include occupations in craft-type specialties, maintenance, computers, electronics, and construction. Subsidize training programs for these occupations at non-DoD schools.

   Use expert opinion to array MOSs by appropriateness for lateral entry. A rough indicator for candidate occupations is the size of the civilian work force in the occupation relative to the size in the military. If the military has virtually all the people in a particular occupation (e.g., infantry), then clearly there can be no lateral entry (other than prior-service people). The opportunities for lateral entry in an occupation (in terms of the proportion of entrants) expand as the number of civilians in that occupation expands. If the occupation is mostly civilian, then the bulk of training is going on in the civilian world, and the military should be able to hire in virtually everyone already trained. Confirm the results of experiments with evaluations (as discussed later in Section IV.C.).

4. Expand opportunities for lateral entry in the reserves. The reserves would seem to be a good place for stockpiling advanced capability at comparatively low cost. With the drawdown in active force levels, there is likely to be a bulge of prior-active-service people available for the reserves. Once this pool is depleted, it is likely that the military will have to get reserves either by providing initial training or through lateral entry, unless reserve force levels shrink to a similar degree.

5. Actively encourage prior-service entrants in occupations with critical shortages. Remove paygrade penalties for prior-service entrants in these specialties. To

alleviate concern about deterioration of skills, a proficiency test could be required, but it should be realistically related to the job.

B. IMPLICATIONS OF POLICY CHANGE

1. Benefits

Changes in policy to encourage lateral entry would have several benefits. These include savings in personnel training and dollars, the ability to mobilize more rapidly, and a better match between people and jobs.

An increase in lateral entry could mean considerably less in-house training. If lateral entrants could be counted upon in several occupations, both fixed and variable costs of training could be reduced. Such a practice would involve less up-front investment and would put skill consumption on more of a pay-as-you-go basis.

The use of lateral-entry programs would allow the services to tailor the size and skill mix of forces to their needs. Rather than the military having to enlist untrained people, wait at best several months for them to complete training, and take the risk of their not successfully completing training, lateral entry would allow the military to enlist trained people immediately. Mobilization might require drawing on generally-trained civilian workers. The military could expand more quickly during a crisis if it knew how to use lateral entrants during peacetime. In addition, productivity would be higher, since fewer people would be occupied learning initial job skills or providing such training to others.

With lateral entry, the "tooth-to-tail ratio" (the ratio of fighting power to support) would increase, because there would not be large numbers of people in training pipelines. In addition, enlistment periods could be shorter, because people would already be trained. Long commitments would no longer be needed to recoup investments in training.

Training would likely be more effective if lateral entry were increased. For occupations with civilian counterparts, the civilian sector does the most training. Evidence developed by the Army indicates that the civilian world probably trains people more effectively and efficiently than the military [5]. If civilian training were used wherever practical (for both untrained and lateral entrants), military training could concentrate on specialized military skills.

Lateral entry is likely to carry less risk of a bad match between worker and occupation. Untrained entrants typically sign on for a specialty with little or no experience.

The military bears the risk that the entrant will not complete training successfully or will complete training but perform poorly. By bringing people in laterally, the military could eliminate much of this risk. More information is available about people who have completed training in the civilian world. They have sufficient interest in a field to make their own investment in it, and successful completion of training adds the dimension of potential competence. For some lateral entrants, successful civilian work experience enhances their probability of success in the military. Also, lateral entrants can be tested in their specialties before accession.

2. Risks

The increased use of lateral entry does carry some risks. The most prominent among them is that civilian training programs would not produce people who can perform military tasks, that the process of inculcating military-specific skills would take an unacceptably long time, or that the quality of leadership would suffer. This could be a particular problem for reservists who never have an extended tour of active duty.

Another risk of increased lateral entry is that the military would become more vulnerable to market fluctuations. It may be that the military could not access the right kinds of people when it needed them. A system that relies on lateral entry has to be willing to pay market wages that vary by occupation and to provide lifetime pay that lateral entrants will find attractive.

Attracting more prior-service entrants also has some risks. For example, the military could attract people of below-average productivity from a particular occupational group. Another risk is that skills would deteriorate unacceptably the longer the separation from the military (unless, perhaps, people work in related civilian fields). In MOSs requiring physical fitness, prior-service entrants may not be such an attractive option, because they would be older and might not maintain physical fitness. However, the military has considerable information about prior-service people and could use that information in deciding whom to rehire.

C. REFINEMENT OF POLICY OPTIONS THROUGH RESEARCH ON LATERAL ENTRY

In order to make lateral entry a viable option, the services must gain more experience with such programs. Some steps toward improving knowledge about lateral

entry are discussed below. Incremental changes in policy on an experimental basis are warranted.

Only the minimum of research has been undertaken in this area. Most of the papers cited here treat lateral entry only tangentially. The potential benefits of increased lateral entry discussed here warrant more experiments with serious lateral-entry programs, followed by formal evaluations to learn the results.

The conceptual model presented here should be refined and used to develop a list of candidate occupations for which lateral entry is likely to be successful for all the services along the lines of the work in [5]. Such an examination should consider separately for each MOS the amount of training required before a person is productive. In addition, the analysis should consider the availability and cost of training both inside the military and in the civilian world.

The civilian markets for the candidate occupations should be carefully analyzed. To the extent possible, occupational unemployment rates and employer vacancy rates should be evaluated. Research has been done, for example, on nursing personnel supply and demand. This information could be used alongside information about nurse enlistments in the reserves and the active forces to determine how the availability of lateral entrants is likely to respond to market fluctuations.

Experiments should be conducted to attempt to increase the extent of lateral entry in one or more occupations. Either the computer area or the electronic technician area seems like a good place to start. Results of the experiments could be used to analyze the most effective combinations of advertising, bonus, salary, and scholarships in generating accessions of lateral entrants.

Consideration should be given to attracting greater numbers of prior-service people back to the military. Additional research could include identification of salary gaps in critical fields and development of strategies for alleviating them. A survey of prior-service entrants could be taken to determine what attracted them back to the military. Information on the performance of prior-service entrants relative to new trainees and personnel with unbroken service would also be helpful.

It also seems important to evaluate existing programs for lateral entry and consider why they are so little used. Are there institutional barriers? Is attracting lateral entrants so different from what recruiters typically do that they need more training?

D. IMPLEMENTATION ISSUES

Implementing changes to encourage more lateral entry into the military would entail changes in requirements, training, and funding.

The military services would have to change the requirements process to allow for a higher proportion of lateral entrants—that is, a higher proportion of personnel in high paygrades. Heavy reliance on lateral entry would complicate the jobs of recruiters, who would have to fill specific niches. Recruiters could be given incentives to find people already trained in critical areas.

Increased lateral entry implies a smaller military training establishment and increased use of civilian training. Attention would have to be paid to the fixed and variable cost implications of such a move.

Finally, pay would have to be more flexible. Congress would have to channel needed funding to access people at higher paygrades, or to provide bonuses large enough to attract lateral entrants, or to pay for scholarships for private sector training (e.g., doctors). Such funding could be redirected from the training budget.

E. SUMMARY

In the future, budgetary constraints will not allow the military to sustain its current levels of active forces. As a result, the current system of training people within the military may no longer be affordable. Lateral entry provides a cost-effective means of minimizing the size of the active forces by accessing people after they are trained and productive and cutting down on the number of people in the training establishment. Lateral entry gives the military the means to add people with the right technical skills quickly as they are needed.

The dearth of knowledge about the experience of current or past lateral entrants is a barrier to determining the appropriate level of lateral entry by specialty group. The challenging environment of the future suggests that the potential benefits of lateral entry should not be ignored.

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